Project of the first evaluation of Web Development in Server Environment: Messaging application

Introduction

The project consists of creating a web application that allows users to exchange messages. It is similar to the usual internal messaging systems in companies or a webmail system.

Optionally, you can develop an application with a more similar approach to Telegram or WhatsApp.

Basic functionality

- Access: Users access the application with username and password that are stored in a database.
- Sending: Users of the application can send messages to other users (the recipient is chosen by name).
- Inbox: Users can see a list or table with the messages they have received, differentiating between read and not. The entire messages are not shown in the inbox, only the subject or the beginning of the message.
- Messages: Users can also check each message individually. In this case, they read the full content and they also have the opportunity to respond.

Extensions

Each student / group will choose among the following extensions to incorporate into their application. Each extension can get a maximum score of one point. Regardless of the number of extensions made, the maximum score that can be obtained in the project is 10.

A1. Self-registration

- Realistic process for users to register on the website.

A2. Password recovery

- Realistic process for users to recover their password or generate a new one.

A3. Messages to several recipients

- Allow to enter more than one recipient in the message sending form.

A4. Encrypted user password

- Store the access codes of the encrypted users in the database (function password_hash ()).

A5. User avatar

- Users can upload an image to use as an avatar.
- It has to have some consequence in the application. For example, that the avatar appears in the messages that a user sends, or that can it be seen when accessing their profile.

A6. User profile

- Users can enter a series of information about themselves, such as age, city of residence, hobbies or their avatar.
- Other users must be able to access this information.

A7. Friendship

- Two users can establish a friendship relationship with each other.
- One of them starts the process by sending a request, which the other has to accept or reject.
- There has to be some consequence in the application. For example, that users can only write to their friends or that a user's profile is only visible to their friends.

A8. Groups

- Option 1: Develop a group system similar to Telegram or WhatsApp.
- Option 2: Allow the creation of groups that are collections of user names. When sending a message to one of these groups, one message is sent to each of the users.

A9. Administration zone

- Administration zone only visible to some users (depending on their role).
- In this area you have to implement tasks typical of an administrator. For example, block or unblock users.

A10. Attached files

- Allow the user to attach files to a message.

A11. Images

- Allow the user to insert images as part of a message.

A12. AJAX

- Perform the web application as a single page application.

A13. Presentation

- Public presentation of the application in the classroom.
- Includes description of the development process and demo.
- The note is proportional to the number of sections made.

Things to turn in

- Script to create the database. It must contain sample data.
- Full application code (htdocs directory).
- A PDF document of maximum 30 pages with:
    - Requirements specification. You must include a table that indicates which extensions have been made.
    - E / R scheme.
    - Logical model of the database.
    - Diagram of the database obtained with SQL Developer.
    - Screen map.
    - Summary table of the files that are part of the application.
    - User manual, including a description of the data loaded into the database (users, passwords, groups ...)

Table of implemented extensions

EXTENSION	IMPLEMENTED (Y / N)
A1	
A2	
A3	
A4	
A5	
A6	
A7	
A8	
A9	
A10	
A11	
A12	
A13	